

FIGURE 1

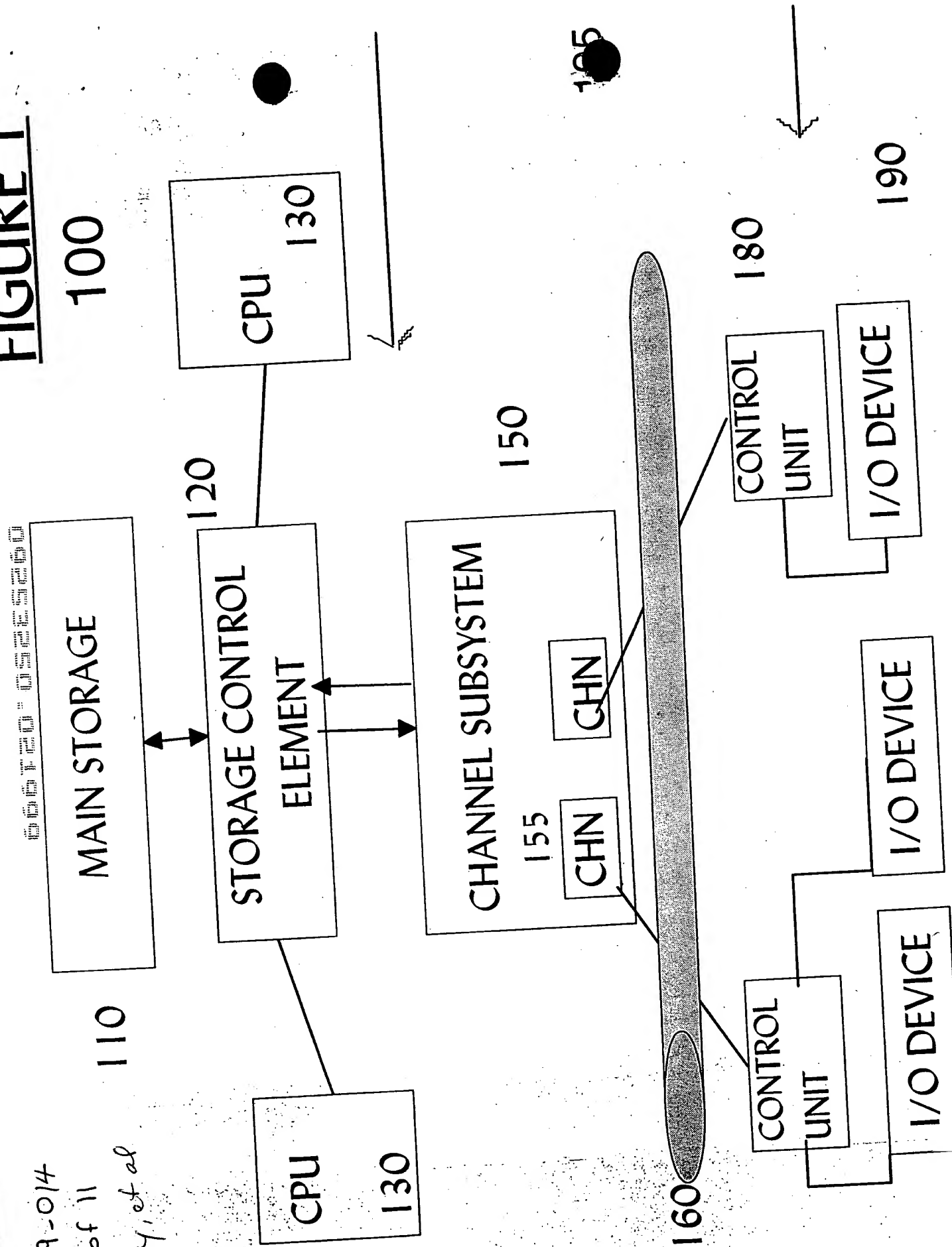


FIGURE 2A

FIG. 20-03E560

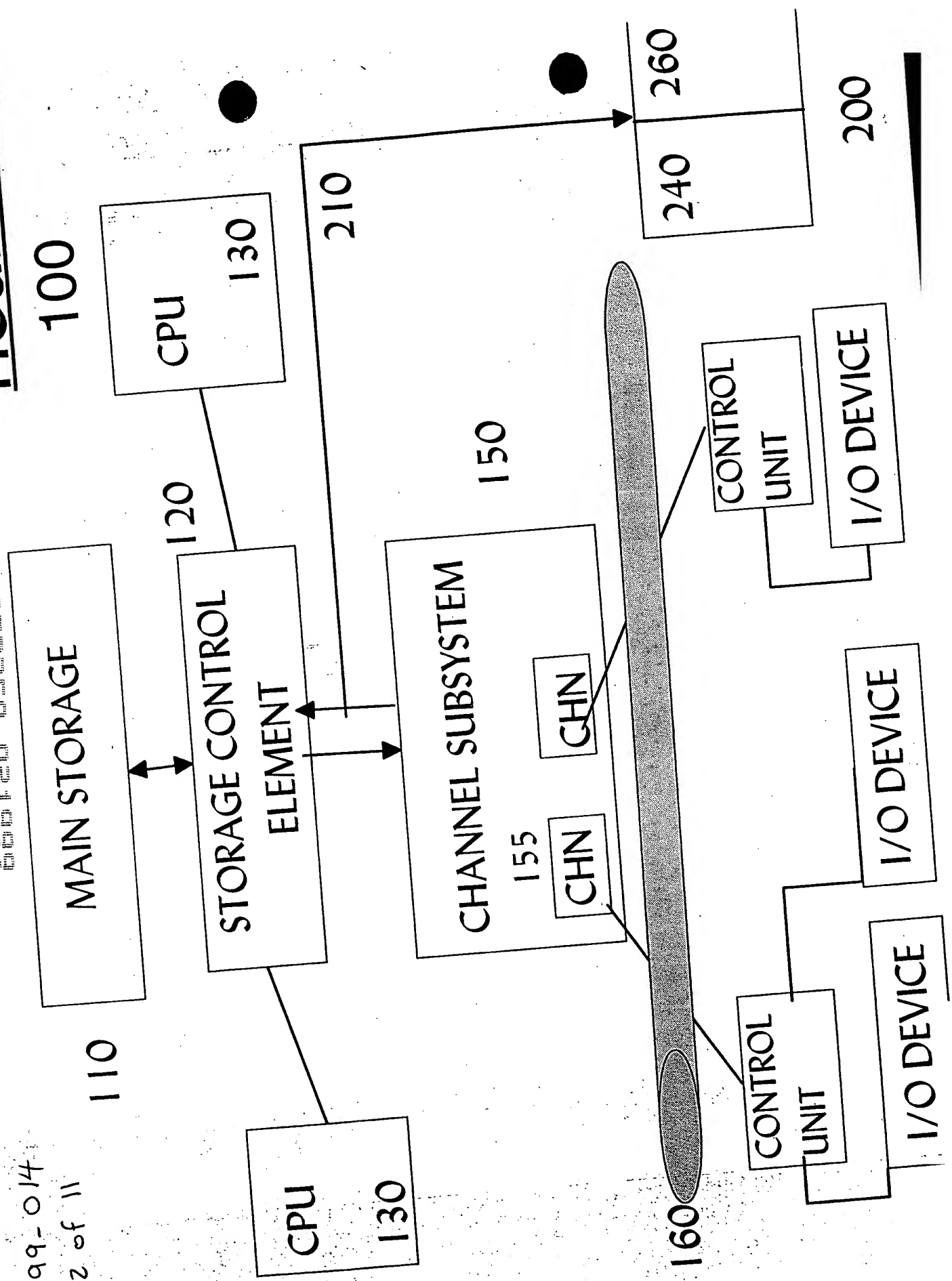
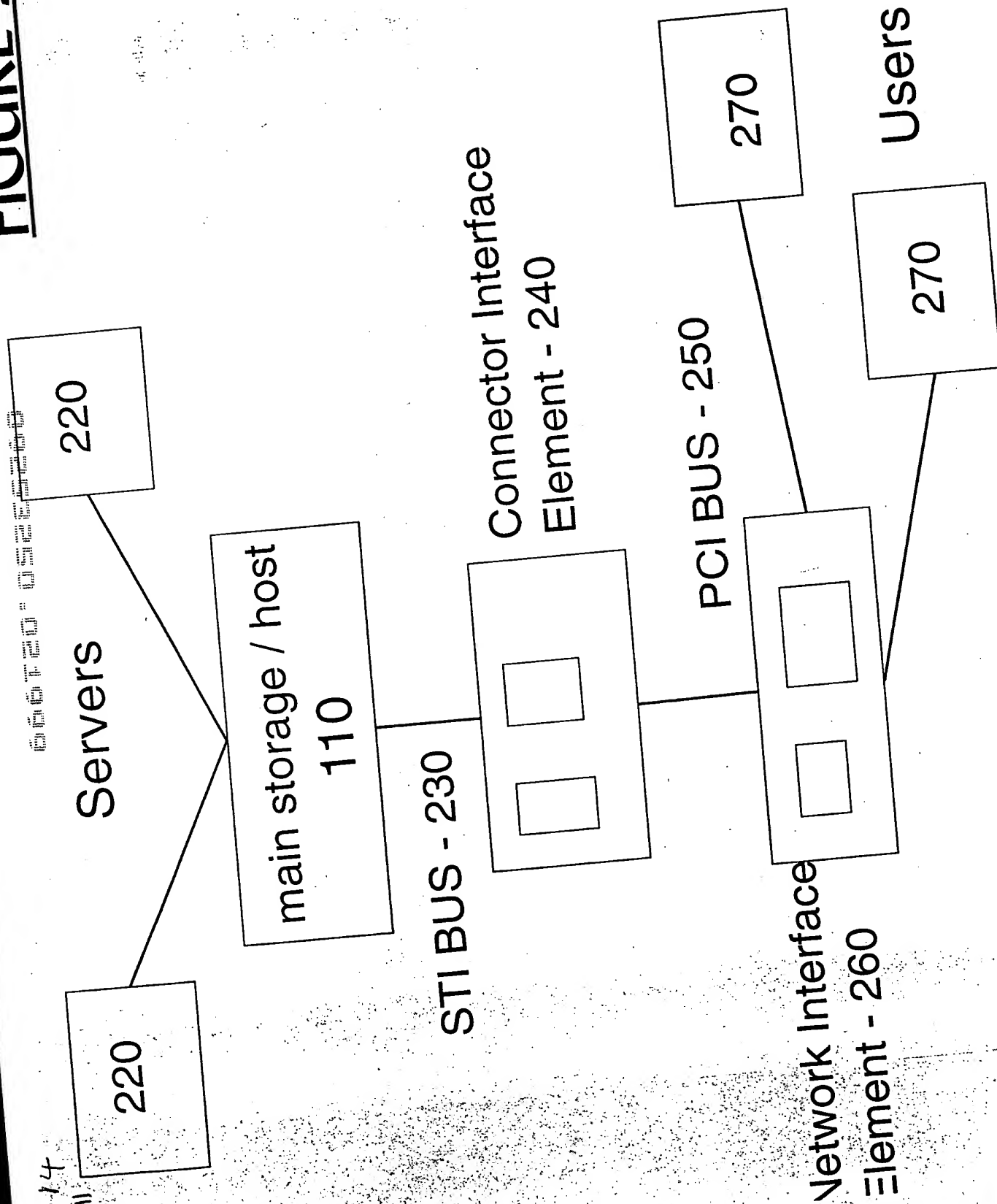


FIGURE 2B



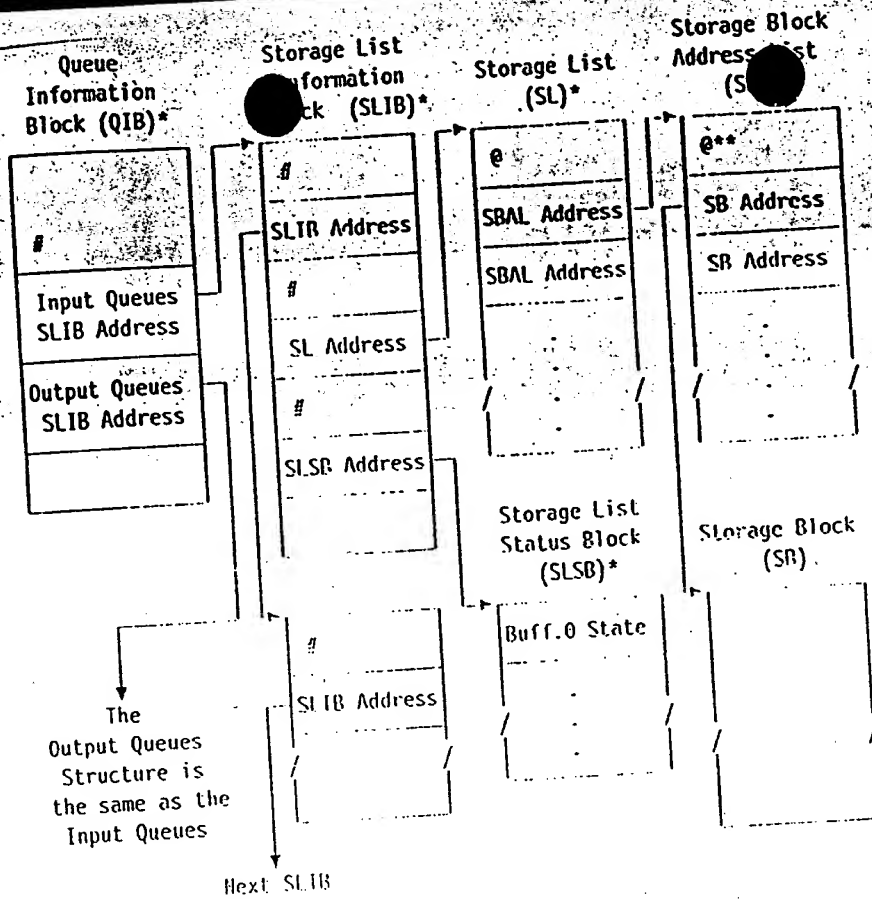


Figure 3

P09-99-014
Page 4 of 11

Offset	Length	Function
0	2	Length
2	1	Category
3	1	Type
4	2	Dev_CUA
6	2	Dev_No
8	1	Priority service order
9	1	Maximum service limit units
10	2	Reserved
12	4	Maximum service units priority 1
16	4	Maximum service units priority 2
20	4	Maximum service units priority 3
24	4	Maximum service units priority 4

Figure 4. New device address SETUP SDU field

P09-99-014

Page 5 of 11

P09-99-014
Page 6 of 11

Request Block The command-request block for store-subchannel-QDIO data has this format:

Word	0	16	31
	'0010'		'0024'
1	00000000 00000000		First SCII Number
2	00000000 00000000		Last SCII Number
3	00000000 00000000		00000000 00000000

Figure 5. Format of Command-Request Block for Store-Subchannel-QDIO Data.

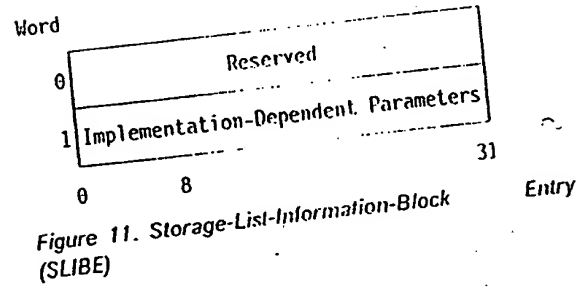
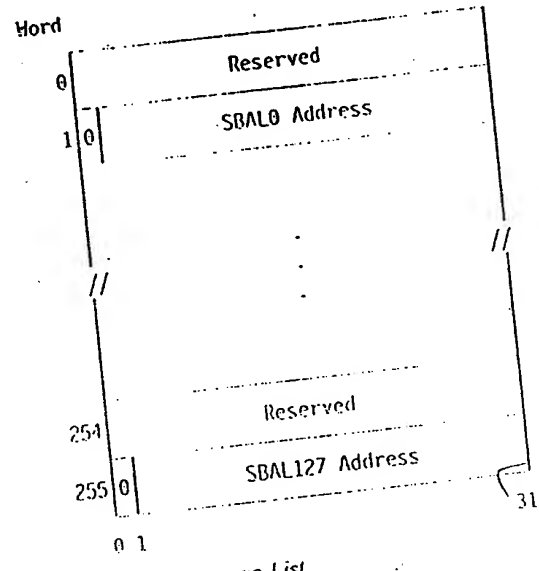
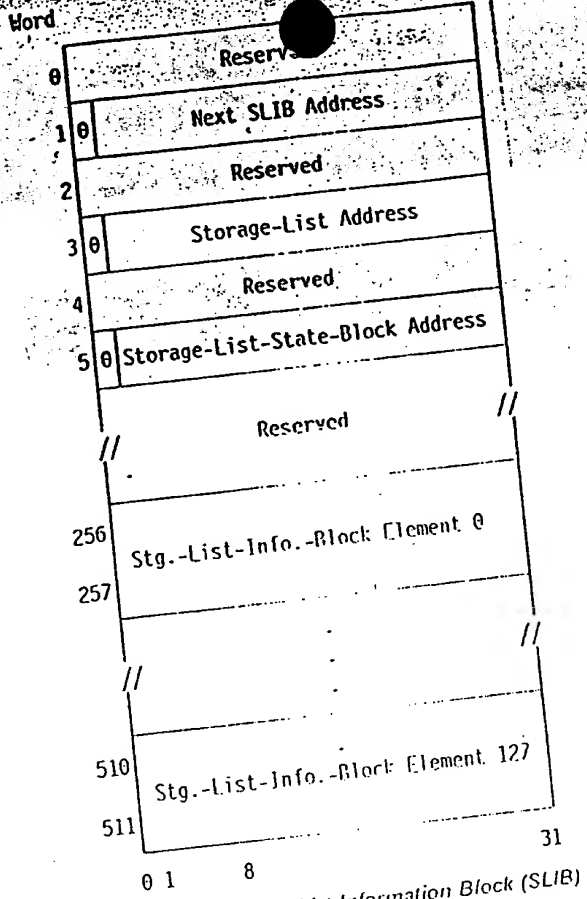
Response Block The command-response block for the store-subchannel-QDIO-data command has this format:

Word	0	16	31
	L2		Response Code
1	C	Rsvd.	00000000 00000000 00000000
2	Subchannel QDIO Description Block		//
10			//
n			//

Figure 6. Format of Command-Response Block for Store-Subchannel-QDIO Data.

The subchannel-QDIO-description block has this format:

00000000 00000000 00000000 00000000

[illegible]

P09-99-0.14
Page 8 of 11

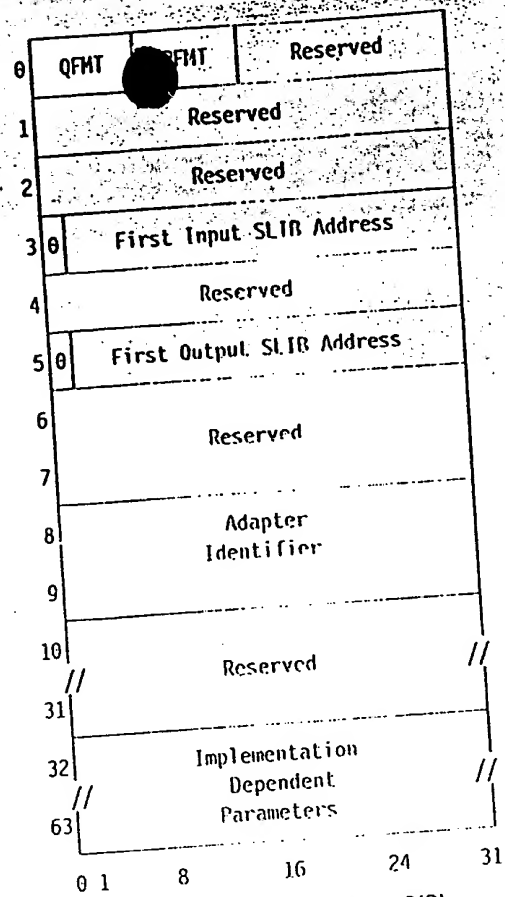


Figure 9. Queue-Information Block (QIB)

66T20-03225260

P09-99-014
Page 9 of 11

Word	0	1	2	3
		00000000 00000000	First SCI Number	00000000 00000000
		00000000 00000000	Last SCI Number	00000000 00000000
		00000000 00000000	00000000 00000000	00000000 00000000
	0	16	31	

Figure 5 Format of Command-Request Block for Store-Subchannel-QDIO Data.

Response Block The command-response block for the store-subchannel-QDIO-data command has this format:

Word	0	1	2	3
		0	Rsvd.	00000000 00000000 00000000
		2		Subchannel QDIO Description Block
		10		
		n		
	0	1	8	16 31

Figure 6 Format of Command-Response Block for Store-Subchannel-QDIO Data.

The subchannel-QDIO-description block has this format:

00000000-00000000

Input Queues

Current State	Actions	New State
Input Buffer Not Initial. Buffer Owner: Program.	By the Program: Allocate buffer.	Input Buffer Empty. Buffer Owner: Adapter.
Input Buffer Empty. Buffer Owner: Adapter.	By the Adapter: Fill buffer with data.	Input Buffer Primed. Buffer Owner: Program.
Input Buffer Empty. Buffer Owner: Adapter.	By the Adapter: Fill buffer with data. HALT signal terminates transfer.	Input Buffer Halted. Buffer Owner: Program.
Input Buffer Empty. Buffer Owner: Adapter.	By the Adapter: Error detected during buffer processing.	Input Buffer Error. Buffer Owner: Program.
Input Buffer Primed. Buffer Owner: Program.	By the Program: Process buffer data.	Input Buffer Empty. Buffer Owner: Adapter.
Input Buffer Primed. Buffer Owner: Program.	By the Program: Process buffer. Unallocate buffer.	Input Buffer Not Initial. Buffer Owner: Program.
Input Buffer Halted. Buffer Owner: Program.	By the Program: Application dependent.	Not Appl.. Q processing is terminated by HSCH
Input Buffer Error. Buffer Owner: Program.	By the Program: Reclaim or replace buffer.	Input Buffer Empty. Buffer Owner: Adapter.

Figure 7 Allowed QDIO Input Queue Buffer State Transitions.

Output Queues

Current State	Actions	New State
Output Buffer Not Initial. Buffer Owner: Program.	By the Program: Allocate and fill buffer.	Output Buffer Primed. Buffer Owner: Adapter.
Output Buffer Empty. Buffer Owner: Program.	By the Program: Fill buffer with data.	Output Buffer Primed. Buffer Owner: Adapter.
Output Buffer Primed. Buffer Owner: Adapter.	By the Adapter: Transmit the buffer data.	Output Buffer Empty. Buffer Owner: Program.
Output Buffer Primed. Buffer Owner: Adapter.	By the Adapter: Transmit the buffer data. HALT signal terminates transfer.	Output Buffer Halted. Buffer Owner: Program.
Output Buffer Primed. Buffer Owner: Adapter.	By the Adapter: Error detected during buffer processing.	Output Buffer Error. Buffer Owner: Program.
Output Buffer Halted. Buffer Owner: Program.	By the Program: Application dependent.	Not Appl.. Q processing is terminated by HSCH.
Output Buffer Error. Buffer Owner: Program.	By the Program: Reclaim and refill buffer with data.	Output Buffer Primed. Buffer Owner: Adapter.

Figure 8 Allowed QDIO Output Queue Buffer State Transitions.

Figure 1 consists of 12 histograms arranged in two rows of six. The top row is labeled '1000' and the bottom row is labeled '100'. Each histogram shows the frequency of the number of non-zero elements in the vector of the first 1000 iterations of the algorithm. The x-axis for each histogram is labeled 'Number of non-zero elements' and the y-axis is labeled 'Frequency'. The distributions are roughly bell-shaped and centered around 1000 for the top row and 100 for the bottom row.

